Amendments to the Claims.

1. (currently amended) A recombinant expression vector comprising a heterologous promoter operably linked to an expressed polynucleotide which naturally encodes an Afc1 polypeptide and hybridizes with human EST z43273 (SEQ ID NO:5), wherein said polypeptide mediates the proteolytic removal of an AAX tripeptide from a prenylated CAAX protein.

2-4 (canceled)

- 5. (currently amended) A recombinant expression vector comprising a promoter operably linked to an expressed polynucleotide which naturally encodes an Rec1 polypeptide and hybridizes with human EST w14344 (SEQ ID NO:6), wherein said polypeptide mediates the proteolytic removal of an AAX tripeptide from a prenylated CAAX protein.
- 6-8. (canceled)
- 9. (original) A recombinant cell transduced with the vector of claim 1.
- 10. (canceled)
- 11. (original) A recombinant cell transduced with the vector of claim 5.
- 12-14. (canceled)
- 15. (original) A method of identifying a compound which inhibits the proteolytic removal of an AAX tripeptide of a CAAX protein in a cell, the method comprising steps:

contacting a sample comprising a recombinant cell according to claim 9, or lysate thereof with a test compound; and

measuring activity or expression of the Afclp or Rcelp expressed by the cell, wherein compound-dependent inhibition of the activity or expression indicates that the compound inhibits the proteolytic removal of the AAX tripeptide.

16. (canceled)

17. (original) A method of identifying a compound which inhibits the proteolytic removal of an AAX tripeptide of a CAAX protein in a cell, the method comprising steps:

contacting a sample comprising a recombinant cell according to claim 11, or lysate thereof with a test compound; and

measuring activity or expression of the Afc1p or Rec1p expressed by the cell, wherein compound-dependent inhibition of the activity or expression indicates that the compound inhibits the proteolytic removal of the AAX tripeptide.

18-20. (canceled)